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EXAMINER	
CHOKSHI, PINKAL R	
ART UNIT	**PAPER NUMBER**
2425	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,597	KELLY ET AL.	
	Examiner	Art Unit	
	PINKAL CHOKSHI	2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6-10 and 13-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-10 and 13-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The office action is in response to communication filed 09/22/2008. Claims 1, 6-8, 10, 15, 18 and 20 are amended. Claim 3-5, 11, and 12 are canceled.

Response to Arguments

2. Applicant's arguments filed 09/22/2008 have been fully considered but they are not persuasive and they are moot in view of the new ground(s) of rejection. Applicant asserts that Maeda does not teach to provide navigation data in a digital broadcast for a user DVD recording. Examiner disagrees with that assessment of the reference. Maeda discloses (col.2, lines 40-50) that the transmitting device transmits digital audio/video data along with management information data for playing back digital audio/video data as represented in Fig. 1 (elements 1, 2). Maeda further discloses (abstract) that the management information is used in playback device so the playback device can make use of various playback functions, such as playback of audio/video, a change of playback procedure (forward/rewind/pause) and a selection of playback information (menu). With regard to the dependent claims, the respective rejections are maintained as Applicant has only argued that the secondary references do not cure the deficiencies of Maeda, nevertheless it is the Examiner's contention that Maeda does not contain any deficiencies. See the new rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1, 2, 8-10, and 15-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,556,546 B1 to Maeda et al (hereafter referenced as Maeda) in view of US Patent 6,504,996 B1 to Na et al (hereafter referenced as Na).

Regarding **claim 1,** "a digital broadcast method for supporting DVD recording" reads on the method for transmission and reception of audio/video data stream which is recorded on DVD media (abstract) disclosed by Maeda and represented in Fig. 1.

As to "a method comprising: providing a video elementary stream, an audio elementary stream and a navigation data stream of at least one of DVD programs" Maeda discloses (col.2, lines 42-50) that it presents audio/video data of DVD along with procedure and selection information data for playing back audio/video data.

As to "packing said video elementary stream, said audio elementary stream and said navigation data stream into a transport stream" Maeda discloses (col.2, lines 42-50) that the audio/video data and procedure information data are multiplexed into a packet and transmitted to a recording media.

As to "wherein said navigation data stream includes at least one of, in-stream data and out-stream data, data for searching, data for reproduction control, and data for generating menus" Maeda discloses (col.2, lines 40-50) that the transmitting device transmits digital audio/video data along with management information data (navigation data) for playing back digital audio/video data as represented in Fig. 1 (elements 1, 2). Maeda further discloses (abstract) that the management information is used in playback device so the playback device can make use of various playback functions, such as playback of audio/video, a change of playback procedure (forward/rewind/pause) and a selection of playback information (menu).

As to "broadcasting said transport stream" Maeda discloses (col.4, lines 12-15) that the audio/video data and management information data issued from media such as DVD are transmitted to receiving device. Maeda meets all the limitations of the claim except he does not explicitly teach that the packets transmitted are transport streams. However, Na discloses (col.3, lines 6-9) that the receiver receives the broadcasting MPEG-2 transport stream. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify Maeda's system by using transport stream to transmit data as taught by Na in order to multiplex all audio/video and management data into one stream and to reproduce DVD quality data at the receiving device by using MPEG-2 stream included in transport stream.

Regarding **claim 2,** Maeda meets all the limitations of the claim except "the method wherein, said packing is carried out according to a digital broadcast standard, and said navigation data stream is loaded into the transport stream as a private stream of the digital broadcast standard." However, Na discloses (col.1, lines 16-20; col.4, lines 25-31) that all the data in program stream are approved in MPEG standard such as audio pack, video pack, and navigation pack. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use broadcast/MPEG standard to transmit streams as taught by Na in order to reproduce standard DVD information with ease (col.3, lines 5-6).

Regarding **claim 8,** "a method for receiving and recording DVD digital broadcast" reads on the method for transmission and reception of audio/video data stream which is recorded on DVD media (abstract) disclosed by Maeda and represented in Fig. 1.

As to "a method comprising: acquiring a video elementary stream, an audio elementary stream and a navigation data stream of at least one of DVD programs from the transport stream" Maeda discloses (col.2, lines 42-46) that it presents audio/video data along with procedure and selection information data for playing back audio/video data.

As to "synthesizing said video elementary stream, audio elementary stream and navigation data stream into a DVD program stream" Maeda discloses

(col.2, lines 42-50) that the audio/video data and procedure information data are multiplexed into a packet and transmitted to a recording media.

As to "wherein the navigation data includes at least one of, in-stream data and out-stream data, data for searching, data for reproduction control, and data for generating menus" Maeda discloses (col.2, lines 40-50) that the transmitting device transmits digital audio/video data along with management information data (navigation data) for playing back digital audio/video data as represented in Fig. 1 (elements 1, 2). Maeda further discloses (abstract) that the management information is used in playback device so the playback device can make use of various playback functions, such as playback of audio/video, a change of playback procedure (forward/rewind/pause) and a selection of playback information (menu).

As to "recording the DVD program stream onto a user's recording medium in a DVD format" Maeda discloses (col.2, lines 8-13) that the MPEG2 digital video data, audio data and procedure information that met the DVD standard, are recorded in the device.

As to "receiving a broadcast transport stream" Maeda discloses (col.4, lines 12-15) that the audio/video data and management information data issued from media such as DVD are transmitted to receiving device. Maeda meets all the limitations of the claim except he does not explicitly teach that the packets transmitted are transport streams. However, Na discloses (col.3, lines 6-9) that the receiver receives the broadcasting MPEG-2 transport stream. Therefore, it

would have been obvious to one of ordinary skills in the art at the time of the invention to modify Maeda's system by using transport stream to transmit data as taught by Na in order to multiplex all audio/video and management data into one stream and to reproduce DVD quality data at the receiving device by using MPEG-2 stream included in transport stream.

Regarding **claim 9,** Maeda meets all the limitations of the claim except "the method, wherein the transport stream complies with a digital broadcast standard, the navigation data stream is loaded into the transport stream as a private data stream of the digital broadcast standard." However, Na discloses (col.1, lines 16-20; col.4, lines 25-31) that all the data in program stream are approved in MPEG standard such as audio pack, video pack, and navigation pack. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use broadcast/MPEG standard to transmit streams as taught by Na in order to reproduce standard DVD information with ease (col.3, lines 5-6).

Regarding **claim 10,** "the method wherein synthesizing includes: separating the navigation data into the in-stream data and the out-stream data" Maeda discloses (col.3, lines 4-6) that the audio/video data and management information are separated from the received packet stream.

As to "synthesizing the in-stream data, the video elementary stream and the audio elementary stream into the DVD program stream and caching the out-stream data" Maeda discloses (col.2, lines 42-50) that the audio/video data are multiplexed into a packet along with procedure information which is stored on the recording medium. Maeda further discloses (col.12, lines 11-16) that the device stored playback management information issued from the data separating device.

As to "said recording includes: recording the out-stream data onto said recording medium" Maeda discloses (col.2, lines 8-13) that the procedure information is being recorded along with MPEG2 audio/video data on the recording device.

Regarding **claim 15,** "a digital broadcast system for supporting user DVD recording" reads on the method for transmission and reception of audio/video data stream which is recorded on DVD media (abstract) disclosed by Maeda and represented in Fig. 1.

As to "a system comprising: program source means, for generating a video elementary stream, an audio elementary stream and a navigation data stream of at least one of DVD programs" Maeda discloses (col.2, lines 8-13, 42-46) that the system presents MPEG2 audio/video data with procedure and selection information data for playing back audio/video data.

As to "wherein the navigation data includes at least one of, in-stream data and out-stream data, data for searching, data for reproduction control, and data for generating menus" Maeda discloses (col.2, lines 40-50) that the transmitting device transmits digital audio/video data along with management information data (navigation data) for playing back digital audio/video data as represented in Fig. 1 (elements 1, 2). Maeda further discloses (abstract) that the management information is used in playback device so the playback device can make use of various playback functions, such as playback of audio/video, a change of playback procedure (forward/rewind/pause) and a selection of playback information (menu).

As to "digital front end means, packing said video elementary stream, said audio elementary stream and said navigation data stream from said program source means into a transport stream" Maeda discloses (col.2, lines 42-50) that the audio/video data and procedure information data are multiplexed into a packet and transmitted to a recording media.

As to "outputting the transport stream to a network" Maeda discloses (col.4, lines 12-15) that the audio/video data and management information data issued from media such as DVD are transmitted to receiving device. Maeda meets all the limitations of the claim except he does not explicitly teach that the packets transmitted are transport streams. However, Na discloses (col.3, lines 6-9) that the receiver receives the broadcasting MPEG-2 transport stream. Therefore, it would have been obvious to one of ordinary skills in the art at the

time of the invention to modify Maeda's system by using transport stream to transmit data as taught by Na in order to multiplex all audio/video and management data into one stream and to reproduce DVD quality data at the receiving device by using MPEG-2 stream included in transport stream.

Regarding **claim 16,** Maeda meets all the limitations of the claim except "the system, wherein said digital front end means packs said video elementary stream, said audio elementary stream and said navigation data stream into said transport stream according to a digital broadcast standard, wherein said navigation data stream is loaded into said transport stream as a private stream of the digital broadcast standard." However, Na discloses (col.1, lines 16-20; col.4, lines 25-31) that all the data in program stream are approved in MPEG standard such as audio pack, video pack, and navigation pack. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to use broadcast/MPEG standard to transmit streams as taught by Na in order to reproduce standard DVD information with ease (col.3, lines 5-6).

Regarding **claim 17,** "the system, further including a plurality of receiving means, wherein at least one of them has a DVD recording function" Maeda discloses (col.2, lines 46-50) that the audio/video data received are recorded in DVD recording medium.

Regarding **claim 18,** "a device for receiving and recording DVD digital broadcast" reads on the method for transmission and reception of audio/video data stream which is recorded on DVD media (abstract) disclosed by Maeda and represented in Fig. 1.

As to "comprising: acquiring means, acquiring a video elementary stream, an audio elementary stream and a navigation data stream of at least one of DVD programs from said transport stream" Maeda discloses (col.2, lines 42-46) that it presents audio/video data along with procedure and selection information data for playing back audio/video data.

As to "wherein the navigation data includes at least one of, in-stream data and out-stream data, data for searching, data for reproduction control, and data for generating menus" Maeda discloses (col.2, lines 40-50) that the transmitting device transmits digital audio/video data along with management information data (navigation data) for playing back digital audio/video data as represented in Fig. 1 (elements 1, 2). Maeda further discloses (abstract) that the management information is used in playback device so the playback device can make use of various playback functions, such as playback of audio/video, a change of playback procedure (forward/rewind/pause) and a selection of playback information (menu).

As to "synthesizing means, synthesizing said video elementary stream, said audio elementary stream and said navigation data stream into a DVD program stream" Maeda discloses (col.2, lines 42-50) that the audio/video data

and procedure information data are multiplexed into a packet and transmitted to a recording media.

As to "DVD producing and recording means, recording the DVD program stream onto a user's recording medium in a DVD format" Maeda discloses (col.2, lines 8-13) that the MPEG2 digital video data, audio data and procedure information that met the DVD standard, are recorded in the device.

As to "receiving means, receiving a broadcast transport stream" Maeda discloses (col.4, lines 12-15) that the audio/video data and management information data issued from media such as DVD are transmitted to receiving device. Maeda meets all the limitations of the claim except he does not explicitly teach that the packets received are transport streams. However, Na discloses (col.3, lines 6-9) that the receiver receives the broadcasting MPEG-2 transport stream. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify Maeda's system by using transport stream to transmit data as taught by Na in order to multiplex all audio/video and management data into one stream and to reproduce DVD quality data at the receiving device by using MPEG-2 stream included in transport stream.

Regarding **claim 19,** Maeda meets all the limitations of the claim except ""the device, wherein said transport stream complies with an existing digital broadcast standard, the navigation data stream is loaded into said transport stream as a private data stream of the digital broadcast standard" Na discloses

(col.1, lines 16-20; col.4, lines 25-31) that all the data in program stream are approved in MPEG standard such as audio pack, video pack, and navigation pack.

As to "acquiring means includes: a demultiplexer, for demultiplexing said transport stream and acquiring video data, audio data and navigation data of a program" Na discloses (col.8, lines 30-33) that the demuliplexer demultiplexes MPEG2 TS into a video stream, an audio stream and a navigation stream as represented in Fig. 5 (element 442).

As to "video decoder, for decoding said video data and generating the video elementary stream" Na discloses (col.8, lines 35-37) that the video decoder decodes the video stream and provides video stream to video mixer as represented in Fig. 5 (element 444).

As to "audio decoder, for decoding said audio data and generating the audio elementary stream" Na discloses (col.8, lines 37-39) that the audio decoder decodes the audio signal and provides audio signal as represented in Fig. 5 (element 446).

As to "navigation data decoder, for decoding the navigation data and generating the navigation data stream" Na discloses (col.8, lines 40-43) that the navigation decoder decodes the navigation stream and provides a command to the video mixer as represented in Fig. 5 (element 450).

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to demux audio/video/navigation decoders to decode data as taught by Na in order to split streams and retrieve original streams.

Regarding **claim 20,** "the device wherein the device further includes: separating means, receiving the navigation data stream generated by the navigation data decoder, separating the navigation data stream into the in-stream data and out-stream data and outputting the in-stream data to the synthesizing means and outputting the out-stream data to a buffer" Maeda discloses (col.3, lines 4-6) that the audio/video data and management information are separated from the received packet stream. Maeda further discloses (col.12, lines 11-16) that the device stored playback management information issued from the data separating device.

As to "synthesizing the in-stream data from the separating means, video elementary stream from the video decoder and the audio elementary stream from the audio decoder into the DVD program stream by the synthesizing means" Maeda discloses (col.2, lines 42-50) that the audio/video data are multiplexed into a packet.

As to "recording the synthesized DVD program stream and said out-stream data onto the recording medium in the DVD format by the DVD producing and recording means" Maeda discloses (col.2, lines 8-13) that the MPEG2 digital

video data, audio data and procedure information that met the DVD standard, are recorded in the device.

5. **Claims 6, 7, 13 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. in view of Na et al as applied to claims 1 and 8 above, and further in view of US Patent 7,043,484 B2 to Rotem et al (hereafter referenced as Rotem).

Regarding **claim 6,** combination of Maeda and Na meets all the limitations of the claim except "the method wherein said in-stream data includes data for connecting networks." However, Rotem discloses (col.7, line 59-col.8, line 5) that the media server receives DVD images and titles from a plurality of media sources as represented in Fig. 2. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to connect server with multiple media sources/networks as taught by Rotem in order to have more selection of DVD title records (col.3, lines 52-53).

Regarding **claim 7,** combination of Maeda and Na meets all the limitations of the claim except "the method wherein the in-stream data includes video and/or audio data selected by a broadcaster." However, Rotem discloses (col.8, lines 6-10) that based on the request received, server selects and produces a audio/video DVD image from database. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to connect server

with multiple media sources/networks as taught by Rotem in order to have more selection of DVD title records (col.3, lines 52-53).

Regarding **claim 13,** combination of Maeda and Na meets all the limitations of the claim except "the method wherein said in-stream data includes data for connecting networks." However, Rotem discloses (col.7, line 59-col.8, line 5) that the media server receives DVD images and titles from a plurality of media sources as represented in Fig. 2. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to connect server with multiple media sources/networks as taught by Rotem in order to have more selection of DVD title records (col.3, lines 52-53).

Regarding **claim 14,** combination of Maeda and Na meets all the limitations of the claim except "the method wherein said in-stream data includes video and/or audio data selected by a broadcaster." However, Rotem discloses (col.8, lines 6-10) that based on the request received; server selects and produces a audio/video DVD image from database. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to connect server with multiple media sources/networks as taught by Rotem in order to have more selection of DVD title records (col.3, lines 52-53).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425